

A scoping review on how generative artificial intelligence transforms assessment in higher education

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Abstract

Generative artificial intelligence provides both opportunities and challenges for higher education. Existing literature has not properly investigated how this technology would impact assessment in higher education. This scoping review took a forward-thinking approach to investigate how generative artificial intelligence transforms assessment in higher education. We used the PRISMA extension for scoping reviews to select articles for review and report the results. In the screening, we retrieved 969 articles and selected 32 empirical studies for analysis. Most of the articles were published in 2023. We used three levels—students, teachers, and institutions—to analyses the articles. Our results suggested that assessment should be transformed to cultivate students' self-regulated learning skills, responsible learning, and integrity. To successfully transform assessment in higher education, the review suggested that (i) teacher professional development activities for assessment, AI, and digital literacy should be provided, (ii) teachers' beliefs about human and AI assessment should be strengthened, and (iii) teachers should be innovative and holistic in their teaching to reflect the assessment transformation. Educational institutions are recommended to review and rethink their assessment policies, as well as provide more inter-disciplinary programs and teaching.